

B2835-24V-240-10MM-23W-XXK-IPYY-HOS

LED Engines



FEATURES

- Lumen output: 24V = 700 lm/ft
- Single row, SMD 2835
- 73 LED/ft / 240 LED/m
- Width: 3/8 in / 10mm
- Length: 16.4ft / 5m
- 24V
- 7 W/ft / 23 W/m
- 113.1 lm/W (5300K)



24V LED ENGINE - IP22	QUANTITY
B2835-24V-240-10mm-23W-2400K-IP22-HOS	LM21423-01
B2835-24V-240-10mm-23W-2700K-IP22-HOS	LM21423-02
B2835-24V-240-10mm-23W-3000K-IP22-HOS	LM21423-03
B2835-24V-240-10mm-23W-3500K-IP22-HOS	LM21423-04
B2835-24V-240-10mm-23W-4200K-IP22-HOS	LM21423-05
B2835-24V-240-10mm-23W-5300K-IP22-HOS	LM21423-06

CUSTOM OPTIONS:

SMD TYPE	INPUT VOLTAGE	LED DENSITY	STRIP WIDTH	RATED POWER	CCT	USAGE	LEAD IN / OUT	STRIP LENGTH	
B2835 - 2.8 x 3.5mm	24V - 24 volt	240 - 240 LED/m	10mm (3/8 in.)	23W/m (7 W/ft)	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> 2400K</div> <div style="display: flex; align-items: center;"> 2700K</div> <div style="display: flex; align-items: center;"> 3000K</div> <div style="display: flex; align-items: center;"> 3500K</div> <div style="display: flex; align-items: center;"> 4200K</div> <div style="display: flex; align-items: center;"> 5300K</div> </div>	IP22 - indoor dry location	HW3 - Hardwire 36" HW6 - Hardwire 72" HW9 - Hardwire 108" HWX - Hardwire cust. DC3 - DC plug 36" DC6 - DC plug 72" DC9 - DC plug 108" DCX - DC plug cust. NO - No lead	Custom length up to 420 inches. Quick ship regular roll is 196 inches - 12 in HW only.	
B2835	24V	240	10mm	23W		IP22			
SMD TYPE	INPUT VOLTAGE	LED/M	WIDTH	W/M	CCT	USAGE	IN	OUT	LENGTH

*NOTE: The light output is provided in lumens per foot, for a CCT of 4200K and a clear lens. Please refer to the optics page for CCT and translucency conversion factors.

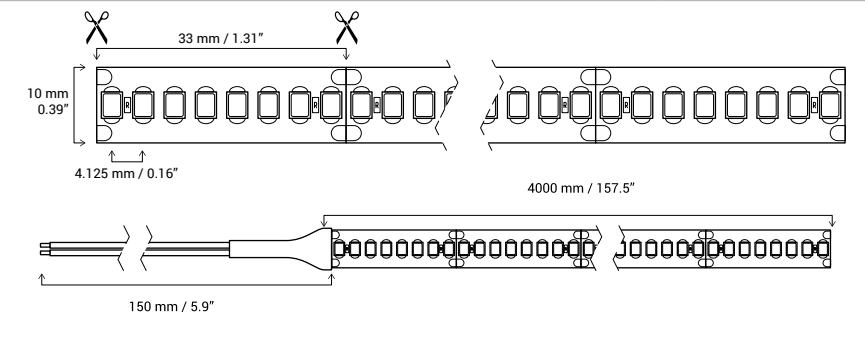
B2835-24V-240-10mm-23W-XXK-IP22-HOS

Specification Sheet



CONFORMS TO UL STD. 2108 & 8750
CERTIFIED TO CSA STD. C22.2 NO. 250.0-08 & C22.2 NO. 9.0

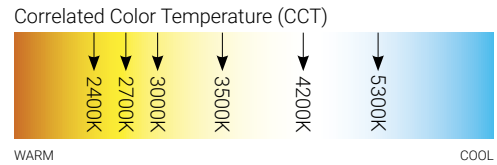
PHYSICAL			
Product Type	Flexible LED Strip		
SMD Type	2835		
Strip Width	3/8 in	10 mm (IP22)	
Strip Total Length (Roll)	13.12 ft	4 m	
LED Linear Density	72 LED/ft	240 LED/m	960 LED/roll total
Can be cut at every	1.31 in	33 mm	8 LED
Storage Temperature	-40°C to +80°C	Operating Temperature	-25°C to +40°C
Lifespan	50 000 Hrs		



ELECTRICAL			
Input Type	DC, Constant Voltage		
Input Voltage	24V DC		
Rated Power (Max.)	7 W/ft	23 W/m	92 W/roll total



Electrical Input	Rated Power (Max.)
CONSTANT VOLTAGE 24V DC	92 W/roll



PRODUCT RANGE										
Part Number	Code	IP	CCT*	Luminous Flux			Luminous Efficacy	CRI**	R9	duv***
B2835-24V-240-10mm-23W-2400K-IP22-HOS	LM21423-01	IP22	2400K (Soft White)	590.2 lm/ft	1936.2 lm/m	7745 lm/roll	88.3 lm/W	97.1	89	0.0028
B2835-24V-240-10mm-23W-2700K-IP22-HOS	LM21423-02	IP22	2700K (Soft White)	597.0 lm/ft	1958.7 lm/m	7835 lm/roll	88.4 lm/W	97.6	94	0.0006
B2835-24V-240-10mm-23W-3000K-IP22-HOS	LM21423-03	IP22	3000K (Warm White)	660.5 lm/ft	2167.0 lm/m	8668 lm/roll	96.4 lm/W	98.2	97	-0.0002
B2835-24V-240-10mm-23W-3500K-IP22-HOS	LM21423-04	IP22	3500K (Bright White)	666.5 lm/ft	2186.7 lm/m	8747 lm/roll	100.4 lm/W	97.2	90	-0.0021
B2835-24V-240-10mm-23W-4200K-IP22-HOS	LM21423-05	IP22	4200K (Neutral White)	700.9 lm/ft	2299.4 lm/m	9198 lm/roll	103.7 lm/W	95.8	81	-0.0034
B2835-24V-240-10mm-23W-5300K-IP22-HOS	LM21423-06	IP22	5300K (Daylight)	799.5 lm/ft	2623.0 lm/m	10492 lm/roll	113.1 lm/W	96.6	88	0.0013

CCT* - Correlated Color Temperature
CRI** - Colour Rendering Index
duv*** - Black-body Curve Deviation

B2835-24V-240-10mm-23W-2400K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.4953, y=0.4238, u=0.2793, v=0.3584, duv=0.0028$
 Correlated Color Temperature: 2363K
 Dominant Wave.: 585.3nm
 Purity: 75.9%
 Flux RGB Ratio: R=30.1%, G=69.0%, B=0.9%
 Peak Wave: 640.7nm
 Half Width: 129.4nm

Rendering Index: Ra=97.1

R1=100 R2 = 98 R3 = 94 R4 = 99 R5 = 98 R6 = 98 R7 = 99 R8 = 97
 R9 = 89 R10=94 R11=97 R12=89 R13=99 R14=95 R15=97

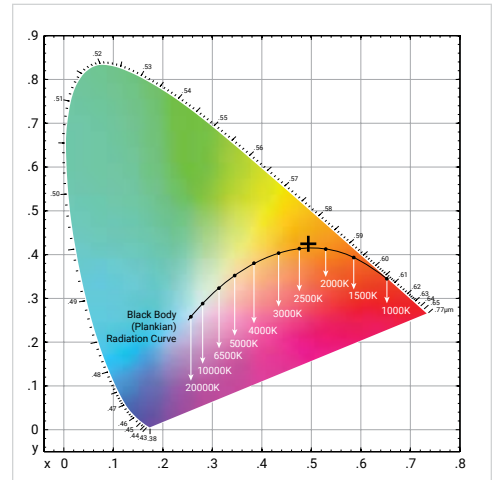
Photo Parameters

Luminous Flux: 1936.2 lm
 Luminous Efficacy: 88.3 lm/W
 Radiant Flux: 8920.2 mW
 Iv: 0.0 mcd

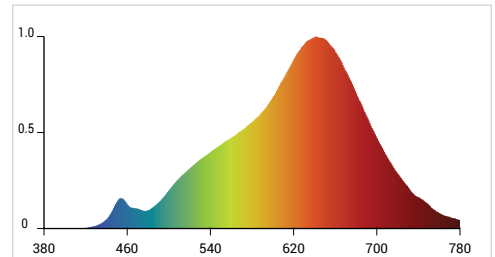


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=65.4%, G=30.5%, B=4.1%



B2835-24V-240-10mm-23W-2700K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.4520, y=0.4102, u=0.2576, v=0.3507, duv=0.0006$
 Correlated Color Temperature: 2810K
 Dominant Wave.: 583.5nm
 Purity: 58.8%
 Flux RGB Ratio: R=26.1%, G=72.3%, B=1.5%
 Peak Wave: 638.7nm
 Half Width: 161.9nm

Rendering Index: Ra=97.6

R1=100 R2 = 98 R3 = 95 R4 = 99 R5 = 99 R6 = 97 R7 = 99 R8 = 98
 R9 = 94 R10=94 R11=97 R12=85 R13=99 R14=96 R15=99

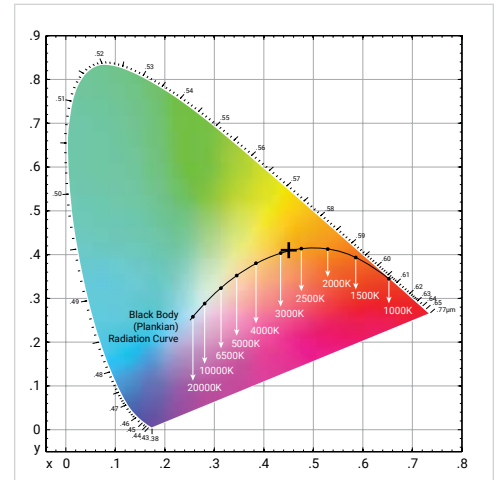
Photo Parameters

Luminous Flux: 1958.7 lm
 Luminous Efficacy: 88.4 lm/W
 Radiant Flux: 9831.0 mW
 Iv: 0.0 mcd

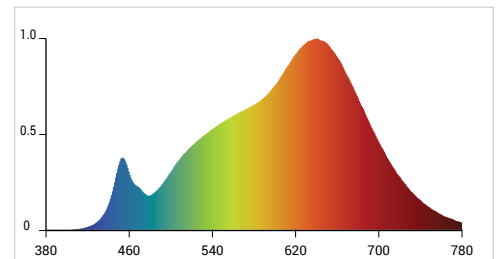


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=57.9%, G=34.2%, B=7.9%



B2835-24V-240-10mm-23W-3000K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.4227, y=0.3983, u=0.2438, v=0.3446, duv=-0.0002$
 Correlated Color Temperature: 3208K
 Dominant Wave.: 582.0nm
 Purity: 46.4%
 Flux RGB Ratio: R=23.7%, G=74.4%, B=1.9%
 Peak Wave: 640.7nm
 Half Width: 184.7nm

Rendering Index: Ra=98.2

R1=100 R2 = 98 R3 = 95 R4 = 98 R5 = 99 R6 = 96 R7 = 97 R8 = 98
 R9 = 97 R10=95 R11=96 R12=86 R13=99 R14=96 R15=99

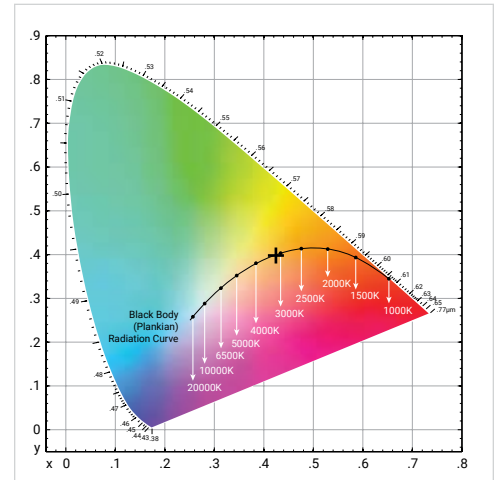
Photo Parameters

Luminous Flux: 2167 lm
 Luminous Efficacy: 96.4 lm/W
 Radiant Flux: 9483.2 mW
 Iv: 0.0 mcd

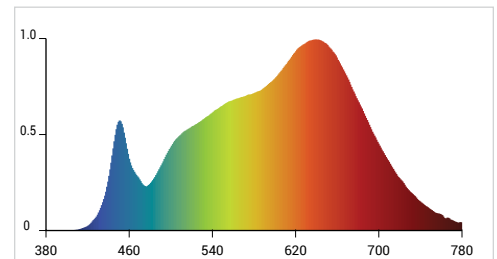


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=52.5%, G=36.7%, B=10.9%



B2835-24V-240-10mm-23W-3500K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.4030, y=0.3849, u=0.2366, v=0.3390, duv=-0.0021$
 Correlated Color Temperature: 3503K
 Dominant Wave.: 581.8nm
 Purity: 36.5%
 Flux RGB Ratio: R=22.7%, G=74.7%, B=36.5%
 Peak Wave: 636.8nm
 Half Width: 188.8nm

Rendering Index: Ra=97.2

R1 = 96 R2 = 98 R3 = 97 R4 = 99 R5 = 98 R6 = 97 R7 = 98 R8 = 95
 R9 = 90 R10=98 R11=97 R12=80 R13=96 R14=98 R15=95

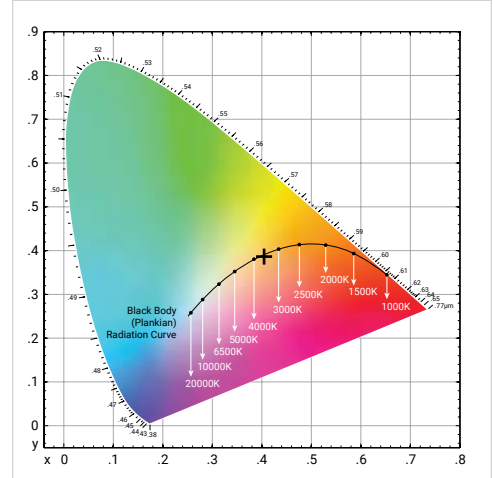
Photo Parameters

Luminous Flux: 2186.7 lm
 Luminous Efficacy: 100.4 lm/W
 Radiant Flux: 7648.9 mW
 Iv: 0.0 mcd

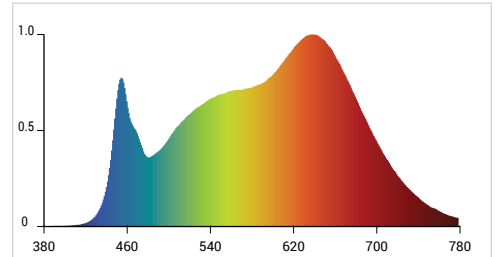


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=50.3%, G=36.3%, B=13.5%



B2835-24V-240-10mm-23W-4200K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.3663, y=0.3606, u=0.2222, v=0.3281, duv=-0.0034$
 Correlated Color Temperature: 4303K
 Dominant Wave.: 580.4nm
 Purity: 18.1%
 Flux RGB Ratio: R=20.2%, G=76.3%, B=3.5%
 Peak Wave: 453.7nm
 Half Width: 28.2nm

Rendering Index: Ra=95.8

R1 = 95 R2 = 97 R3 = 97 R4 = 98 R5 = 96 R6 = 96 R7 = 97 R8 = 92
 R9 = 81 R10=97 R11=98 R12=73 R13=96 R14=97 R15=92

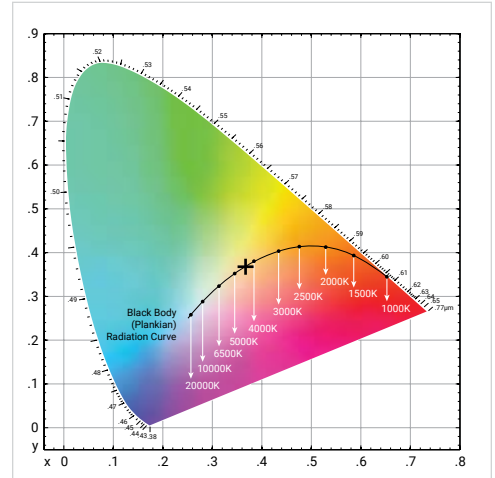
Photo Parameters

Luminous Flux: 2299.4 lm
 Luminous Efficacy: 103.7 lm/W
 Radiant Flux: 9884.7 mW
 Iv: 0.0 mcd

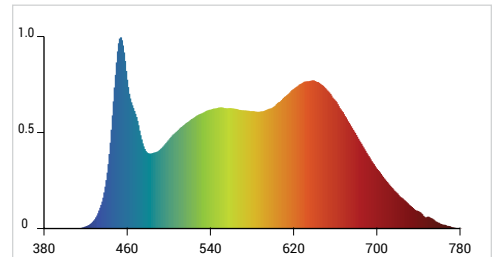


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=43.6%, G=37.8%, B=18.6%



B2835-24V-240-10mm-23W-5300K-IP22-HOS

Test Data for 1 Meter LED Strip Length

Chroma Parameters

Chromaticity Coordinates: $x=0.3407, y=0.3506, u=0.2089, v=0.3223, duv=0.0013$
 Correlated Color Temperature: 5168K
 Dominant Wave.: 568.4nm
 Purity: 7.4%
 Flux RGB Ratio: $R=17.3\%, G=78.9\%, B=3.8\%$
 Peak Wave: 452.7nm
 Half Width: 26.8nm

Rendering Index: Ra=96.6

R1 = 98 R2 = 99 R3 = 98 R4 = 96 R5 = 96 R6 = 95 R7 = 97 R8 = 95
 R9 = 88 R10=96 R11=96 R12=77 R13=99 R14=99 R15=97

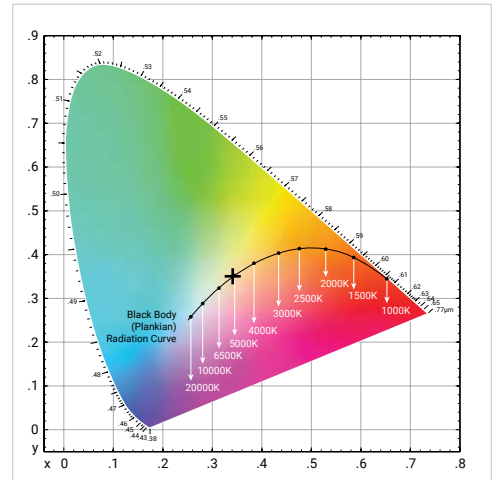
Photo Parameters

Luminous Flux: 2623 lm
 Luminous Efficacy: 113.1 lm/W
 Radiant Flux: 10826.2 mW
 Iv: 0.0 mcd

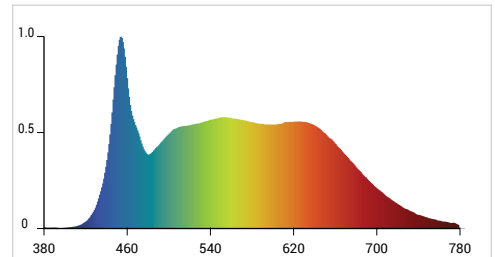


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C.I.E. 1931 Chromaticity Diagram



Spectral Ratio: R=35.9%, G=41.4%, B=22.7%



NOTES

